

caterer, announcing some important banquet, and one of the "herd" is forthwith cautiously dispatched to the scene of festivities, with as much care taken for his personal comfort *en route* as though he were the pampered pet dog of some great lady.

Beyond doubt turtle products are vastly cheaper today than they were ten years ago, because the famous



The Statue Covered.

calipee and calipash are now manufactured in portable form, mainly for the convenience of invalids and explorers venturing into malarial countries like the West Coast of Africa, where readily-made turtle soup is found a very powerful restorative in cases of debilitating fever.

There is little chance, however, that the turtle trade will ever attract investors, for not only is the demand extremely limited, but, as we have seen, all conditions appertaining to the supply are extremely precarious. In the nature of things, turtle soup must ever remain beyond the reach of the poorer classes, but it has for centuries figured at aldermanic banquets and great civic festivities, and we have evidence that Lucullus himself loved the luscious green fat, which has become synonymous with high living and an opulent table generally the world over.

UNVEILING STATUES BY ELECTRICITY.

BY GEORGE J. JONES.

The unveiling of a statue under ordinary circumstances is a very impressive occasion, but it is frequently rendered ludicrous by a failure at a very critical moment. Often the drapery which is used to hide the lines of the memorial refuses to respond to the tugs and pulls given at the cords which were designed to draw the fabric away. This sort of mishap is no less embarrassing than when the material falls of its own accord in advance of the set time. Having witnessed several such accidents at Washington, D. C., J. S. Hill, an electrical engineer employed in the Department of the Interior, set about some time ago to devise some method of performing this operation by the use of the electrical current, so as to render such occasions free from accidents. Recently he announced the completion of his self-assumed task.

The scheme calls for the erection of two poles placed on either side of the monument, with a stout wire cable stretched from top to top. The ends of the cable pass down the side of one pole, and are secured near the bottom. Held slightly away from the pole, the cable acts as a guide for counterweights. Mounted on the cable are two swivel pulleys, each supporting a wooden staff balanced therefrom. Flags are generally made use of for the purpose of hiding the lines of the statue until such time as it is desired to reveal them to the assemblage, and in the electrical process the bunting is secured from these sticks. The flags hanging from the sticks completely encircle the statue. The lengthwise edges of the flags are supplied with small magnets and corresponding armatures, the magnets being connected in series, and the current from a few batteries is sufficient to hold the edges of the flags together, even in the face of a strong wind. This current is conveyed through a small insulated wire. When all is ready one of a pair of touch-buttons, placed at a convenient point, is pressed. The flags open like a book, and for a few seconds they remain as an effective background to the memorial. The second button is then pressed, and the flags move off under the action of the weights, toward the poles, leaving a free and unobstructed view of the statue.

The inventor of this scheme had an ambitious desire to put the scheme to a severe test at the unveiling of the Franklin statue in Paris. He submitted a plan to the American ambassador.

His suggestion was that the ceremony be made a double one, the actual pressing of the button being done at Philadelphia, Pa., at the meeting of the American Philosophical Society, by some distinguished electrician who might attend the gathering or by some of the descendants of Benjamin Franklin, several of whom are still residing in that city. There was not sufficient time, however, to make the necessary arrangements, which would require much correspondence.

Making Casks of Cork.

BY ARTHUR H. J. KEANE.

A great impulse to the cork trade promises to be given by the discovery of a new process relating to the manufacture of casks, barrels, and the like from the raw material in question. The process consists in placing staves made of cork edgewise instead of flat, as is usual when making casks of wood; in this way all cracks and holes traverse the stave in the direction of its width, thus assuring perfect impermeability, even with cork of inferior quality or of a grade not suitable for any commercial purposes. The staves, when assembled and hooped, are pressed together by means of a cooper's lathe or other suitable apparatus. The hoops are slipped on in quite a natural manner without the necessity for using a hoop-driver; they become imbedded in the cork, and are all the more adherent as, owing to the elastic nature of the cork, the body of the cask always tends to swell. The bottom of the cask is composed of strips of cork, also placed edgewise, and so joined together as to form a base of any desired thickness; upon this latter a circumference is drawn corresponding in length to the height of the cask. When placed in position, the pressure exerted upon it by the first hoop gives it both impermeable and perfectly solid qualities. Its rigidity may also be further enhanced if desired by placing across it a sheet of steel, a T-iron, or a wooden brace, the ends of which are made fast to the first hoop. A wooden bottom, covered with cork or not as preferred, may also be used with advantage, if no press of sufficient power to render the cork bottom impermeable is available. Any risk of mustiness or "corky taste" being imparted to the contents is prevented in the following manner: Before placing them in position the staves are steeped in boiling paraffine, and the inside of the cask is coated with a varnish similar to that now used for beer barrels. The heated air expands, and causes the coating to penetrate into the pores of the cork; the cask is then emptied, and the outside is given a good dressing with pitch, coal tar, or other substance that will harden cork. Casks and barrels of all sizes may be made in this way, by suitably cutting the cork. The average weight of such a cask is from 34 to 35 pounds, or one-third the weight of a wooden cask, so that costs of transport (especially as regards the return of empties) are greatly reduced. A cork and a wooden barrel were recently filled with water at 10 deg. C. and placed right in the eye of the sun; at the end of two hours the water in each was tested, and the temperature found to be 10 and 18 degrees respectively; after six hours' exposure the temperatures were 12 and 40 degrees in the cork and the wooden barrel respectively. In the shade water in a wooden cask became undrinkable at the end of two days, whereas the supply tested in a cork cask was quite fresh and sweet, and remained so after being kept under test conditions for a very long space of time. This is a point of vital importance in connection with



The Statue Unveiled.

UNVEILING STATUES BY ELECTRICITY.

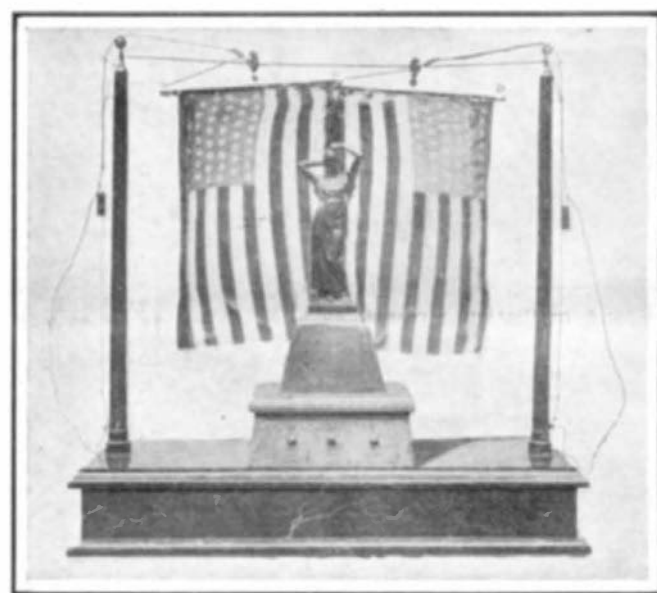
the keeping and storage of wines, especially in warm countries, as cork affords a very efficient means of protection against fermentations of all kinds. This industry, though still in its infancy, is already giving most encouraging results in France, and a great future is forecasted for it.

Overhauling Brass.

When brass first began to be rolled it was not treated in any manner to remove the dross or other imperfections which were present on the surface. The customer was obliged to take the sheet metal in whatever condition it was. As the consumer became more critical, the so-called "overhauling" was practised, i. e., the scraping of the surface of the brass with a hand scraper. This, too, finally became unsatisfactory on account of the impossibility of removing all the imperfections. The old-fashioned Stever overhauling machine made its appearance, and for many years was the only appliance known to the brass rolling mill industry. Taking this for a base, the modern and very efficient overhauling machine has been evolved. Various attempts have been made to devise some more rapid machine, but without success.

For years it was the custom of the American brass rolling mill to overhaul all brass. It made no difference what it was, all went through the same process. Within the last year or two, however, there has been a tendency toward the partial elimination of the overhauling machine, and at the present time several of the large brass rolling mills have abandoned the use of the overhauling machine entirely on certain classes of work and are now rolling a proportion of their brass without any treatment whatever, except perhaps, first pickling it, and even this is dispensed with in many instances.

This practice was started in the commonest varieties of brass, and it has gradually spread to those of



The Parting of the Flags.

more importance, until now even drawing brass is made in this manner. The success of such practice depends, of course, upon the quality of the cast plate, but when care is used in making it, it is a matter of surprise to find how well it will work.

There are many uses for brass which do not require the metal absolutely free from imperfections, and it is in these instances that overhauling can be dispensed with. As overhauling is also an inspection process, its elimination is apt to be attended with bad results unless much care is used in dispensing with it.—Brass World.

Cadmium Alloy for Bearings.

A new alloy for bearings has been patented by Hans Kreusler, of Wilmersdorf, Germany, in which the following are used:

Cadmium	45 parts
Zinc	45 parts
Antimony	10 parts

This alloy is stated by the inventor to have a very low coefficient of friction and to cast well.—Brass World.

Japanese Machinery Imports.

In turning lathes the United Kingdom and the United States practically divided the import for the whole of Japan last year, of which Kobe absorbed nearly all. In cotton-spinning machinery, of which about six-sevenths were exported by the United Kingdom, Kobe absorbed five-sixths of the British machinery and five-sevenths of the whole import from all countries. In turning lathes Germany advanced her total import into Japan by over 300 per cent, but the value remained at not more than one-fifth of the British and one-eighth of the American import.